NIEHS Funds New Centers in Texas and California

The health effects of passive smoke, the prevalence of dangerous chemicals in pesticides, and the genetic factors that make people susceptible to harm from pollutants are among the topics that will be studied at the two newest Environmental Health Sciences Centers. Funded by the NIEHS, the centers in Smithville, Texas, and Los Angeles, California, will allow researchers in those areas to join the nationwide network of NIEHS scientists in their search for ways to better protect human health from environmental hazards.

A $5 million, five-year NIEHS grant will be used to create a center at the University of Southern California that will bring together more than 40 scientists from Los Angeles–area institutes like the University of California at Los Angeles and the California Institute of Technology. Researchers at the center will emphasize human studies (rather than laboratory models) and will conduct research on topics including air pollution, bioaerosols, pesticides, organic compounds, aflatoxins, radon, and magnetic fields.

"We are committed as a group to interdisciplinary research, and we bring a rich array of resources to bear on these investigations," said John M. Peters, a USC professor who will serve as director of the center.

The new Texas center, which will be located in the M.D. Anderson Science Park's Research Division in Smithville, will be funded by a $4.2 million, five-year NIEHS grant. Located southeast of Austin, the center will couple the efforts of scientists at M.D. Anderson Cancer Center in Houston with those at the University of Texas at Austin.

Research at the Texas center will focus on advancing understanding of the mechanisms of cancer, answering questions such as why certain foods may prevent cancer and why certain chemicals cause cancer in some people but not in others. Noncancer diseases of the lungs, kidneys, liver, and nervous system and the environmental factors that cause them will also be studied at the center.

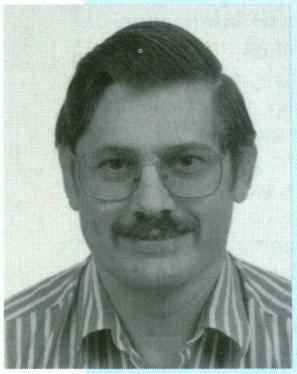
John DiGiovanni, associate director of the M.D. Anderson Science Park's Research Division, will serve as director of the new center. DiGiovanni said the center will provide an important opportunity for scientists from different disciplines to combine their knowledge and expertise. "Identifying environmental causes [of disease] and discovering how they can be prevented cannot be done in a single laboratory," he said.

The national network of NIEHS centers includes 19 Environmental Health Sciences Centers, 5 Marine and Freshwater Biomedical Centers, and 3 Developmental Centers. Researchers from different disciplines work in coordination with one another and with scientists from the other centers to share scientific insights.

To receive an Environmental Health Sciences Center grant, a university or other research institution must already have an established program of biomedical research in environmental health hazards. In addition, the institution should already be receiving a minimum of $1.5 million in grant support for projects related to environmental health sciences.

Mason Awarded IES Silver Medal

The International EPR Society (IES) has awarded Ronald P. Mason, a research chemist in the NIEHS Laboratory of Molecular Biophysics, the 1996 Silver Medal in Biology and Medicine. The society, which is composed of scientists from many disciplines who use electron paramagnetic resonance technology in their work, presented the award to Mason during a conference in Denver, Colorado, in July. Mason is a council member of the IES.


NIEHS

Harold M. Schwartz, the founder president of IES, said that Mason was chosen for the award because of his many years of work in applying EPR techniques to biological investigations. "This is an award for long-term, solid contribution," Schwartz said. "Mason has made contributions especially in terms of spin trapping and our understanding of free radical intermediates."

"[Mason] is probably the only [EPR] person . . . with thorough expertise in both spin labeling and spin trapping techniques," wrote Balaraman Kalyanaraman, acting treasurer of IES and a long-time colleague of Mason's, in an editorial to be published in an upcoming IES newsletter. "His contributions on nitroanion radicals and their futile aerobic metabolism are clearly textbook material."

Mason joined the NIEHS in 1978 and is now group leader of the institute's free radical metabolite program. He is also an associate professor of toxicology at the University of North Carolina at Chapel Hill and an associate professor in the integrated toxicology program at Duke University.

The IES offers several awards for outstanding research relating to electron paramagnetic resonance. The Bruker Award, the Zaviosky Award, and the IES Gold Award each carry a $500 cash prize. The committee for each award focuses alternately on chemistry, physics and instrumentation, or biology and medicine. An IES Silver Medal in each category and a Young Research Worker's Award are also given by the society, each carrying a small cash prize. The awards are presented every 1–2 years.

Mason received a B.A. from the University of California at Riverside and a Ph.D. in physical chemistry from the University of Wisconsin–Madison. He has published over 200 journal articles, which, according to Kalyanaraman, have "opened new opportunities for [EPR] in biological systems, both *in vitro* and *in vivo*."